

The opinion in support of the decision being entered today was **not** written for publication and is **not** precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARKKU LESKELA, MIKKO RITALA, TIMO HATANPAA,
TIMO HANNIEN, and MARKO VEHKAMAKI

Appeal No. 2005-1654
Application No. 09/787,062

HEARD: October 20, 2005

Before OWENS, JEFFREY T. SMITH, and FRANKLIN, **Administrative
Patent Judges.**

FRANKLIN, **Administrative Patent Judge.**

REQUEST FOR REHEARING

Appellants have submitted a Request for Rehearing (hereinafter "Request") under 37 CFR §41.79, of our decision mailed November 7, 2005.

Beginning on page 1 of the Request, appellants argue that the Board did not consider appellants' arguments regarding the differences between CVD and ALE and therefore, improperly placed the burden of showing a lack of expectation of success upon appellants.

Appellants argue that it is well-established that both the suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not in the applicants' disclosure. Request, pages 1-2.

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Appellants argue that the only asserted suggestion to combine the precursors of Kirlin with an ALE process is a "passing reference" and the background teachings of DiMeo to "related epitaxial deposition methods." Request, page 2. Appellants argue that this general connection between CVD and ALE is not sufficient to provide both a motivation to combine the references and a reasonable expectation of success for using Kirlin's CVD precursors in an ALE process, particularly in view of the evidence of well-known differences in the requirements of CVD and ALE.

We are not in agreement with appellants' position for the following reasons.

Firstly, we fully considered appellants' arguments regarding the differences between CVD and ALE, in making our determinations in our decision mailed November 7, 2005. As discussed beginning at the bottom of page 3 of our decision, the examiner's position is that DiMeo discloses that there are methods for forming multi-component oxide thin film layers, and that these methods include chemical vapor deposition and "related epitaxial deposition methods, such as but not limited to atomic layer epitaxial (ALE) deposition methods." See column 1, lines 25-49 of DiMeo. We also stated that in this light, DiMeo further teaches that "[t]he present invention is therefore directed towards the goal of forming multi-component oxide thin film layers within fabrications such as but not limited to thin film microelectronics fabrications and thin film sensor element fabrications through chemical vapor deposition (CVD) methods and related epitaxial deposition methods, while avoiding the foregoing deficiencies." See column 2, lines 37-44 of DiMeo. Decision, pages 3-4.

In view of the above-mentioned teachings, Appellants' referral to "a passing reference" skews the teachings of DiMeo. That is, appellants wish to minimize the teachings of the applied art, which were discussed in the paragraph bridging pages 3-4 of our decision. As the examiner has found, the teachings of DiMeo in this regard is more than "a passing reference." These teachings suggest that the method described in DiMeo is applicable to chemical vapor deposition as well as atomic layer epitaxial deposition methods. We stated this in the first paragraph, on page 4 of our decision mailed November 7, 2005.

With further regard to appellants' assertion that the Board did not consider appellants' arguments regarding the differences between CVD and ALE, we considered all of appellants' arguments. Furthermore, although we limited our review to only the Bedair article (as stated in our footnote 1 on page 2 of our decision), from among the 3 articles discussed by appellants' in their brief, we did so with full awareness of appellants' position regarding CVD and ALE processes.

In view of the above, we therefore disagree with appellants' position that the examiner's rejection does not show a suggestion or motivation to combine the teachings, as well as a reasonable expectation of success in making the combination. As explained by the examiner, DiMeo provides both the suggestion and the expectation of success for using Kirlin's CVD precursors in an ALE process.

On page 2 of the Request, appellants refer to a statement made by the Board (the statement being "appellants do not state that types of precursors as described in Kirlin cannot work in an ALE process"), and use this statement in support of their

assertion that the Board placed the burden of establishing a reasonable expectation of success on appellants. This is incorrect. The Board made this statement in the context that appellants did not provide sufficient rebuttal evidence to overcome the prima facie case obviousness, such as evidence that the types of precursors described in Kirlin cannot work in an ALE process.


On page 3 of the Request, appellants repeat their argument that ALE and CVD have different requirements for precursors and that one cannot automatically assume workability for CVD precursors for an ALE process. This statement is illustrative of appellants' flaw in connection with a prima facie case of obviousness. We note that obviousness can be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggesting, or motivation to do so found either in the reference or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). As stated by the examiner in the answer, and as cited in our decision on pages 3 and 4, the teachings in DiMeo would have suggested to one of ordinary skill in the art that the precursors disclosed in Kirlin were suitable for use in atomic layer epitaxial deposition methods. As stated, supra, DiMeo teaches that methods for forming multi-component oxide thin film layers include chemical vapor deposition and related epitaxial deposition methods, such as, but not limited to, atomic layer epitaxial deposition methods. This teaching suggests that Kirlin's precursors would work in an ALE process, as expressed by the examiner on pages 7-8 of the answer. Decision, page 4. The examiner stated on page 8 of the answer

that "DiMeo et al. explicitly suggests using Kirlin's precursors (see. col. 8, lines 50-55 of DiMeo et al.) which, as per the abstract of Kirlin, include cyclopentadienyls."

In view of the above, we do not find in the "Request" any argument convincing of us of error in the conclusions we reached in our decision mailed November 7, 2005. Accordingly, appellants' Request for Rehearing is denied.

DENIED

Terry J. Owens
TERRY J. OWENS
Administrative Patent Judge


JEFFREY T. SMITH
Administrative Patent Judge

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) APPEALS AND
) INTERFERENCES

Beverly A. Franklin
BEVERLY A. FRANKLIN
Administrative Patent Judge

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